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10/787,043	02/25/2004	Katsuhiro Ishido	CANO:123	4407

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EXAMINER	
CHEN, HUO LONG	
ART UNIT	PAPER NUMBER
4157	
MAIL DATE	DELIVERY MODE
02/14/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/787,043	ISHIDO ET AL.	
	Examiner	Art Unit	
	HUO LONG CHEN	4157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/25/2004, 9/24/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.

With respect to **claims 15-17**, a "program" is a functional descriptive material and a functional descriptive material per se is excluded from any of the four categories of a process, machine, manufacture, or composition of matter. Therefore, the claim subject matter, "program" is not statutory regardless it's claimed functional description since it cannot be realizable without being encoded within a computer readable medium. See MPEP 2106.01 (I).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in-
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent; or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, *except* that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English.

3. Claim 1, 8 and 15 are rejected under 35 U.S.C 102 (b) as being anticipated by the applicant's admitted prior art (hereinafter, "prior art", see Fig. 10 and paragraph [82]).

With respect to **claim 1**, the applicant's admitted prior art teaches that an original size detecting apparatus (Fig. 10) comprises:

an original platen (Fig. 10, element 102);

an original presser plate that presses an original placed on said original platen (Fig. 10, element 112);

a light source that irradiates light onto the original [In this case, when information of the original surface in the main-scanning direction is read by the CCD 110 after the light source 103 is lighted (paragraph 82)];

a reflected light-reading device that reads reflected light of the light irradiated from said light source onto the original [In this case, when information of the original surface in the main-scanning direction is read by the CCD 110 after the light source 103 is lighted (paragraph 82)];

an open state-detecting device that detects at least two open states of said original presser plate [the optical sensors (Fig 10, elements113 &114) detecting the opening angle of the original presser plate [Fig. 10, element 112]);

and an original size-determining device that performs predetermined control corresponding to each of the open states of said original presser plate detected by said open state-detecting device, to determine a size of the original based on a result of the reading by said reflected light-reading device [original size sensor (Fig.10, element 111)]

With respect to **claim 8**, it is analyzed and rejected for the same reason set forth in the rejection of claim 1, because claim 1 and claim 8 are in the same inventive scope.

With respect to **claim 15**, it is analyzed and rejected for the same reason set forth in the rejection of claim 1, because claim 1, claim 15 are in the same inventive scope.

4. Claim 5-6, 12-13 and 17 are rejected under 35 U.S.C 102 (b) as being anticipated by Ishido et al. (US 20010035987).

With respect to **claim 5,** Ishido et al. teach an original size detecting apparatus comprising:

an original platen that supports an original to be read [platen glass (Fig. 2, element 102)

a light source that irradiates light onto the original [the light emitted from the lamp (Fig.2 element 105)];

a first detecting device that detects whether or not a dimension of the original in a sub-scanning direction is equal to or smaller than a predetermined dimension [the original size sensor (Fig. 2, element 113) senses the original size in the sub-scan direction of the original (Fig. 2, element 101) placed on the platen glass (Fig. element 102)];

a second detecting device that detects a dimension of the original in a main-scanning direction orthogonal to the sub-scanning direction [a CCD (Fig. 2, element 112) is disclosed to detect a dimension of the original in a main-

scanning direction orthogonal to the sub-scanning direction. (Fig. 3 and paragraph 80)];

and a control and determining device that controls said first and second detecting devices to determine a size of the original based on respective results of detections by said first and second detecting devices (Fig.1, element 203 and paragraph 80),

wherein said control and determining device carries out a first original size-determining process when an output from said second detecting device indicative of a result of detection carried out (Fig. 23, S141) thereby with said light source turned off contains components having smaller values than a predetermined output value (Fig. 23, S142), and carries out a second original size-determining process when the output from said second detecting device indicative of the result of detection carried out thereby is equal to or larger than the predetermined output value (Fig. 23, S145).

With respect to **claim 6**, which further limits claim 5, Ishido et al. teach that the first original size-determining process (Fig. 4, sub-scan direction) comprises excluding points (Fig. 4, element 104) on said original platen corresponding to values of the output from said second detecting device (Fig.4, main scan direction) which are equal to or larger than the predetermined output value [only a range closer to the original alignment mark (Fig.4, element 104) than the boundary point between the range within which no ambient light is found and the range within which ambient light is found can be set as an effective sensing range], and determining the size of the original based on a result of detection

carried out again by said second detecting device (Fig.4, main scan direction) with said light source turned on (Fig. 14, S 142), and a result of the detection carried out by said first detecting device (Fig. 14, S142).

With respect to **claim 12**, it is analyzed and rejected for the same reason set forth in the rejection of claim 5, because claim 5 and claim 12 are in the same inventive scope.

With respect to **claim 13**, it is analyzed and rejected for the same reason set forth in the rejection of claim 6, because claim 6 and claim 13 are in the same inventive scope.

With respect to **claim 17**, it is analyzed and rejected for the same reason set forth in the rejection of claim 5, because claim 5, claim 17 are in the same inventive scope.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 2-4, 7, 9-11, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's admitted prior art (hereinafter, "prior art", see Fig. 10 and paragraph [82]) in view of Ishido et al. (US 20010035987).

With respect to **claim 2**, the applicant's admitted prior art teaches that an original size detecting apparatus (Fig. 10) comprises:

an original platen (Fig. 10, element 102);

an original presser plate that presses an original placed on said original platen (Fig. 10, element 112);

a light source that irradiates light onto the original [In this case, when information of the original surface in the main-scanning direction is read by the CCD 110 after the light source 103 is lighted (paragraph 82)];

a reflected light-reading device that reads reflected light of the light irradiated from said light source onto the original [In this case, when information of the original surface in the main-scanning direction is read by the CCD 110 after the light source 103 is lighted (paragraph 82)];

an open state-detecting device that detects at least two open states of said original presser plate [the optical sensors (Fig 10, elements113 &114) detecting the opening angle of the original presser plate [Fig. 10, element 112]);

and an original size-determining device that turns on said light source and said reflected light-reading device when it is detected by said open state-detecting device that said original presser plate is in a open state which is the opening angle of presser plate large than 40 degree, and determines a size of the original based on an output from said reflected light-reading.

However, the applicant's admitted prior art fails to disclose one more step to detect if the second opening angel of the presser plate is less than the first opening angel of the presser plate before determining a size of the original being based on an output from said reflected light-reading.

Ishido et al. teach a step to detect if the ambient light is presented before determining the original size (Fig. 13, S133). If the ambient light is presented, a step of excluding the range at which ambient light exists from original width sensing range (Fig. 13, S134).

The invention of Ishido et al. and applicant's admitted prior art are combinable because they are from analogous art, sensing of original size and Ishido et al. have realized that the influence of external scattered light would cause erroneous detection of the size of an original. It would have been obvious to a person of ordinary skill in the art at the time of invention to combine the inventions of Ishido et al. and applicant's admitted prior art to have to have the original presser plate to be opened in an angle in order to prevent external scattered light to cause erroneous detection of the size of an original.

With respect to **claim 3**, which further limits claim 2, applicant's admitted prior art teaches that a original size-determining device is operable when said original presser plate is in an open state where the opening angle thereof is larger than when said original presser plate is in the first open state, to turn off said light source and said reflected light-reading device (Fig. 10).

With respect to **claim 4**, which is further limits claim 2, applicant's admitted prior disclose an original size-determining device (Fig. 10, element 111) determines the size of the original based on an output from said sub-scanning direction dimension-detecting device and an output from said reflected light-reading device (Fig. 7)

However, applicant's admitted prior art fails to disclose that a sub-scanning direction dimension-detecting device that detects a dimension of the original in a sub-scanning direction.

Ishido et al. teaches detecting a dimension of the original in a sub-scanning direction (Fig.3).

The invention of Ishido et al. and applicant's admitted prior art are combinable because they are from analogous art, image processing apparatus. It would have been obvious to a person of ordinary skill in the art at the time of invention to combine the inventions of Ishido et al. and applicant's admitted prior art because of detecting a dimension of the original size by sub-scanning is well known.

With respect to **claim 7**, which further limits claim 5, the applicant's admitted prior art fails to disclose detecting an edge in the output from the second detecting device to detect the size of the original.

Ishido et al. teach that ambient light is sensed by turning off the lamp (Fig. 2, element 105) of the image reading apparatus (paragraph 66). A range in the main scan direction where ambient light is found is excluded in the original size sensing (paragraph 54). Also, an original alignment mark 104 is added to a reference registration portion of the platen glass 102 of the image reading apparatus. When an original is placed to be aligned with this mark (Fig. 4, element 104), only a range closer to the original alignment mark (Fig.4, element 104) than the boundary point between the range within which no ambient light is

found and the range within which ambient light is found can be set as an effective sensing range (paragraph 66).

The invention of Ishido et al. and applicant's admitted prior art are combinable because they are from analogous art, sensing of original size. It would have been obvious to a person of ordinary skill in the art at the time of invention to combine the inventions of Ishido et al. and applicant's admitted prior art because detecting an range for an original to be placed is an alternative step detect the original size.

With respect to **claim 9**, it is analyzed and rejected for the same reason set forth in the rejection of claim 2, because claim 2 and claim 9 are in the same inventive scope.

With respect to **claim 10**, it is analyzed and rejected for the same reason set forth in the rejection of claim 3, because claim 3 and claim 10 are in the same inventive scope.

With respect to **claim 11**, it is analyzed and rejected for the same reason set forth in the rejection of claim 4, because claim 4 and claim 11 are in the same inventive scope.

With respect to **claim 14**, it is analyzed and rejected for the same reason set forth in the rejection of claim 7, because claim 7 and claim 14 are in the same inventive scope.

With respect to **claim 16**, it is analyzed and rejected for the same reason set forth in the rejection of claim 2, because claim 2, claim 16 are in the same inventive scope.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUO LONG CHEN whose telephone number is (571)270-3759. The examiner can normally be reached on 8:00am to 5:00pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571)272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Huo Long Chen/ Patent Examiner

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